Comparison efficiency of six-week versus twelve-week administration of Clindamycin and Ciprofloxacin in treatment of diabetic foot osteomyelitis without surgical indication

ABSTRACT:

BACKGROUND & OBJECTIVE: *Since, there is little evidence regarding the optimal duration of antibiotic treatment in diabetic foot osteomyelitis, this study was performed to compare the efficiency of 6 and 12 weeks of treatment with ciprofloxacin + clindamycin in patients with diabetic foot osteomyelitis with no surgical indication.*

METHODS: *Thirty patients with diabetic foot osteomyelitis without surgical indication were selected randomly and evenly were divided into two groups (6 and 12 weeks of treatment with antibiotics). In this study, bacterial cultures, and antibiogram , changes of parameters such as CRP, albumin, ESR, hemoglobin A1c, creatinine, fasting blood sugar, glucose two hours, WBC, absolute count of neutrophil and clinical outcome (percentage of complete healing and non-healing, the time of complete healing, radiological abnormality and recurrence the disease after treatment) were studied.*

RESULTS: *The results showed that S. aureus (mainly) and Escherichia coli were common isolated agents. Also, in the 6 weeks of treatment with antibiotics during timing intervals the values of CRP (P= 0.03), ESR (P=0.03), two-hour glucose (P=0.02), WBC (P=0.04) and absolute neutrophil count (P=0.04), and in, the other group the values of CRP (P=0.02), ESR (P=0.02), hemoglobin A1c (P=0.04), fasting blood sugar (P=0.04), two-hour glucose (P=0.01), WBC (P=0.02) and absolute neutrophil count (P=0.04) showed significant differences. But, there was no significant difference concerning the clinical outcomes between the two groups.*

CONCLUSION: *The results showed that 6 and 12 weeks of treatment with antibiotics in diabetic foot osteomyelitis without surgical indication have no significant difference concerning the clinical outcomes, therefore, 6 weeks of treatment with antibiotics can be recommended for patients if clinical and paraclinical follow-uping were performed, continuously.*

KEY WORDS: *Osteomyelitis, diabetic foot, ciprofloxacin, clindamycin.*